BRUHAT BANGALORE MAHANAGARA PALIKE

PRE-MEASUREMENT

MEASUREMENT SHEET

Name of work: Improvements to Roads and Drains at Ganesha Layout and Surrounding areas in Ward No. 15 (Kuvempunagara).

Estimated Cost : Rs. 25.00 Lakhs

Head of Account : P3726 Zonal Public Works - POW Works

Job Code: 015-23-000005

Name of Agency: Sri.B.P Shanmugam, No. 28/2, 2nd Cross, Giddappa Block, Ganganagar, Bengaluru - 560032.

Work order No: BBMP/EE/BTP/WO/169/2022-23 D: 15-03-2023.

Measurements Recarded on :

Sl. No.	Description of Item	Measurments				Qty	Unit
		No.s	L	B	D		
1	**Earth work excavation by manual means for drains**,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost. **In all kinds of soils Depth upto 1.5 m**						
	For New CC Drain - Earthwork						
	Ganesh Layout 7th Cross						
	From Main Road to Dead End						
	N/S	1	15.00	1.00	1.00	15.00	
		1	15.00	1.00	1.00	15.00	
		1	15.00	1.00	1.00	15.00	
		1	8.80	1.00	1.00	8.80	
	From Dead end to House						
	S/S	1	15.00	1.00	1.00	15.00	
		1	7.00	1.00	1.00	7.00	
	Ganesh Layout 5th Cross						
	From Main Road to Dead End						
	N/S	1	15.00	1.00	1.00	15.00	
		1	15.00	1.00	1.00	15.00	
		1	13.50	1.00	1.00	13.50	
	From Dead end to Main Road						
	S/S	1	15.00	1.00	1.00	15.00	
		1	15.00	1.00	1.00	15.00	
		1	13.50	1.00	1.00	13.50	
	MS Palya Mubarak Road						
	From Sandeep Unnikrishnana Road to 2nd Cross						
	N/S	1	15.00	1.00	1.00	15.00	
		1	15.00	1.00	1.00	15.00	

Assistant Engineer

B.P.Shanmugam
Contractor

Assistant Executive Engineer

Assistant Executive Engineer
Vidyaranyapura Sub Divisi
B.B.M.P, Bangalore - 97

Sl. No.	Description of Item	Measurments				Qty	Unit
		No.s	L	B	D		
		1	15.00	1.00	1.00	15.00	
		1	15.00	1.00	1.00	15.00	
		1	15.00	1.00	1.00	15.00	
		1	2.40	1.00	1.00	2.40	
	Culverts						
	Vinayakanagara 5th Cross	1	5.00	1.50	1.10	8.25	
	Vyshnavi Layout 2nd A Cross	1	7.60	1.50	1.00	11.40	
	Srinidhi Layout 8th Cross	1	7.00	1.50	1.00	10.50	
		Total Qty =				**270.35**	
		Qty Ltd Approved Qty =				**270.00**	Cum

Assistant Engineer
Ward No. 15

B.P. Singh
Contractor

Assistant Executive Engineer
Vidyaranyapura Sub Division

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Sl. No.	Description of Item	Measurments No.s	L	B	D	Qty	Unit
	Measurements Recarded on :						
2	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately) Mix 1:4:8(M5) Using 40 mm nominal size graded crushed coarse aggregates						
	For New CC Drain - Bed Concrete						
	Ganesh Layout 7th Cross						
	From Main Road to Dead End						
	N/S	1	15.00	1.00	0.15	2.25	
		1	15.00	1.00	0.15	2.25	
		1	15.00	1.00	0.15	2.25	
		1	8.80	1.00	0.15	1.32	
	From Dead end to House						
	S/S	1	15.00	1.00	0.15	2.25	
		1	7.00	1.00	0.15	1.05	
	Ganesh Layout 5th Cross						
	From Main Road to Dead End						
	N/S	1	15.00	1.00	0.15	2.25	
		1	15.00	1.00	0.15	2.25	
		1	13.50	1.00	0.15	2.03	
	From Dead end to Main Road						
	S/S	1	15.00	1.00	0.15	2.25	
		1	15.00	1.00	0.15	2.25	
		1	13.50	1.00	0.15	2.03	
	MS Palya Mubarak Road						
	From Sandeep Unnikrishnana Road to 2nd Cross						
	N/S	1	15.00	1.00	0.15	2.25	
		1	15.00	1.00	0.15	2.25	
		1	15.00	1.00	0.15	2.25	
		1	15.00	1.00	0.15	2.25	
		1	15.00	1.00	0.15	2.25	
		1	2.40	1.00	0.15	0.36	
	Culverts						
	Vinayakanagara 5th Cross	1	5.00	1.50	0.15	1.13	
	Vyshnavi Layout 2nd A Cross	1	7.60	1.50	0.15	1.71	
	Srinidhi Layout 8th Cross	1	7.00	1.50	0.15	1.58	
		Total Qty =				**40.44**	
		Qty Ltd Approved Qty =				**40.20**	Cum

Assistant Engineer
Ward No. 15

Contractor

Assistant Executive Engineer
Vidyaranyapura Sub Division

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Sl. No.	Description of Item	Measurments				Qty	Unit
		No.s	L	B	D		
	Measurements Recarded on :						
4	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) M20 Design Mix Using 20 mm nominal size graded crushed coarse aggregates						
	For New CC Drain - Raft						
	Ganesh Layout 7th Cross						
	From Main Road to Dead End						
	N/S	1	15.00	0.90	0.15	2.03	
		1	15.00	0.90	0.15	2.03	
		1	15.00	0.90	0.15	2.03	
		1	8.80	0.90	0.15	1.19	
	From Dead end to House						
	S/S	1	15.00	0.90	0.15	2.03	
		1	7.00	0.90	0.15	0.95	
	Ganesh Layout 5th Cross						
	From Main Road to Dead End						
	N/S	1	15.00	0.90	0.15	2.03	
		1	15.00	0.90	0.15	2.03	
		1	13.50	0.90	0.15	1.82	
	From Dead end to Main Road						
	S/S	1	15.00	0.90	0.15	2.03	
		1	15.00	0.90	0.15	2.03	
		1	13.50	0.90	0.15	1.82	
	MS Palya Mubarak Road						
	From Sandeep Unnikrishnana Road to 2nd Cross						
	N/S	1	15.00	1.00	0.15	2.25	
		1	15.00	1.00	0.15	2.25	
		1	15.00	1.00	0.15	2.25	
		1	15.00	1.00	0.15	2.25	
		1	15.00	1.00	0.15	2.25	
		1	2.40	1.00	0.15	0.36	
	Culverts						
	Vinayakanagara 5th Cross	1	5.00	1.30	0.20	1.30	
	Vyshnavi Layout 2nd A Cross	1	7.60	1.30	0.20	1.98	
	Srinidhi Layout 8th Cross	1	7.00	1.30	0.20	1.82	
	For New CC Drain - Side Wall						
	Ganesh Layout 7th Cross						
	From Main Road to Dead End						
	N/S	2	15.00	0.15	0.60	2.70	
		2	15.00	0.15	0.58	2.61	
		2	15.00	0.15	0.60	2.70	
		2	8.80	0.15	0.58	1.53	
	From Dead end to House						

Assistant Engineer

Contractor

Assistant Executive Engineer

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Sl. No.	Description of Item	Measurments				Qty	Unit
		No.s	L	B	D		
	S/S	2	15.00	0.15	0.61	2.75	
		2	7.00	0.15	0.58	1.22	
	Ganesh Layout 5th Cross						
	From Main Road to Dead End						
	N/S	2	15.00	0.15	0.60	2.70	
		2	15.00	0.15	0.58	2.61	
		2	13.50	0.15	0.58	2.35	
	From Dead end to Main Road						
	S/S	2	15.00	0.15	0.59	2.66	
		2	15.00	0.15	0.58	2.61	
		2	13.50	0.15	0.60	2.43	
	MS Palya Mubarak Road						
	From Sandeep Unnikrishnana Road to 2nd Cross						
	N/S	2	15.00	0.15	0.58	2.61	
		2	15.00	0.15	0.61	2.75	
		2	15.00	0.15	0.58	2.61	
		2	15.00	0.15	0.59	2.66	
		2	15.00	0.15	0.59	2.66	
		2	2.40	0.15	0.59	0.42	
	Culverts						
	Vinayakanagara 5th Cross	2	5.00	0.30	0.60	1.80	
	Vyshnavi Layout 2nd A Cross	2	7.60	0.30	0.60	2.74	
	Srinidhi Layout 8th Cross	2	7.00	0.30	0.60	2.52	
		Total Qty =				**88.30**	
		Qty Ltd Approved Qty =				**88.00**	Cum

Assistant Engineer
Ward No. 15

Contractor

Assistant Executive Engineer
Vidyaranyapura Sub Division

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Sl. No.	Description of Item	Measurments No.s	L	B	D	Qty	Unit
	Measurements Recarded on :						
5	Supplying, Fitting and Placing un-coated TMT bar Reinforcement in sub-structure complete as per Drawing and Technical Specifications.						
	U Shape Drains	**No**	**L**	**Mtrs**	**Kg/m**	**Kgs**	
	Ganesh Layout 7th Cross						
	From Main Road to Dead End						
	10 mm dia	449	2.10	942.90	0.62	584.60	
	8 mm dia	16	53.80	860.80	0.39	335.71	
	Total					**920.31**	
	From Dead end to House						
	10 mm dia	184	2.10	386.40	0.62	239.57	
	8 mm dia	16	22.00	352.00	0.39	137.28	
	Total					**376.85**	
	Ganesh Layout 7th Cross N/S						
	10 mm dia	363	2.10	762.30	0.62	472.63	
	8 mm dia	16	43.50	696.00	0.39	271.44	
	Total					**744.07**	
	Ganesh Layout 5th Cross S/S						
	10 mm dia	363	2.10	762.30	0.62	472.63	
	8 mm dia	16	43.50	696.00	0.39	271.44	
	Total					**744.07**	
	MS Palya Mubarak Road N/S						
	10 mm dia	646	2.10	1356.60	0.62	841.09	
	8 mm dia	16	77.40	1238.40	0.39	482.98	
	Total					**1324.07**	
	RCC Drains Grant Total					**4109.36**	
	Culverts						
	Vinayakanagara 5th Cross						
	16 mm	51	2.70	137.70	1.58	217.57	
	12 mm	34	5.00	170.00	0.89	151.30	
	Total					**368.87**	
	Vyshnavi Layout 2nd A Cross						
	16 mm	76	2.70	205.20	1.58	324.22	
	12 mm	34	7.60	258.40	0.89	229.98	
	Total					**554.19**	
	Srinidhi Layout 8th Cross						
	16 mm	71	2.70	191.70	1.58	302.89	
	12 mm	34	7.00	238.00	0.89	211.82	
	Total					**514.71**	
	Culvert Grand Total					**1437.76**	
						5547.12	Kgs
				Total Qty =		**5.55**	Tonnes
				Qty Ltd Approved Qty =		**5.53**	Tonnes

Assistant Engineer
Ward No. 15

Contractor

Assistant Executive Engineer
Vidyaranyapura sub Division

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97